

Review of Factoring

GCF

ex 1:

$$3x^2 + 6x = 0$$

$$3x(x+2) = 0$$

$$x=0 \quad x=-2$$

Dec 10-7:23 AM

Regular

ex 2:

$$x^2 - 2x - 8 = 0$$

+c same sign

-c different signs

$$(x-4)(x+2) = 0$$

$$x=4 \quad x=-2$$

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ex 3:

$$6x^2 - 11x - 10 = 0$$

$$6x^2 - 15x + 4x - 10 = 0$$

$$3x(2x-5) + 2(2x-5)$$

$$(2x-5)(3x+2) = 0$$

$$x = \frac{5}{2} \quad x = -\frac{2}{3}$$

Mar 23-11:03 AM

ex 4:

$$8x^2 + 14x + 5 = 0$$

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Patterns

- i. $a^2 - b^2$
- ii. $a^2 - 2ab + b^2$
- iii. $a^2 + 2ab + b^2$

ex 6:

$$4m^2 + 4m + 1 = 0$$

ex 8:

$$y^2 - 49 = 0$$

$$(y+7)(y-7) = 0$$

$$y = -7 \quad y = 7$$

$$\sqrt{y^2} = \pm\sqrt{49}$$

$$y = \pm 7$$

Dec 10-12:00 PM

Dec 10-12:02 PM

The quadratic formula.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

ex 5:

$$4x^2 + 13x + 10 = 0$$

$$x = \frac{-13 \pm \sqrt{169 - 4(4)(10)}}{2(4)}$$

$$x = \frac{-13 \pm 3}{8} \quad \left(-\frac{5}{4}, -2\right)$$

Sep 5-2:59 PM